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Patent
Attorney Docket No. 1028724-000142

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

James Chris Sackellares et al.

Application No.: 10/648,354

Filing Date: August 27, 2003

Title: OPTIMIZATION OF MULTI-DIMENSIONAL TIME SERIES PROCESSING FOR SEIZURE WARNING
AND PREDICTION

Group Art Unit: 3736

Examiner: Vikram P. Sundararaman

Confirmation No.: 3420

**THIRD
INFORMATION DISCLOSURE STATEMENT
TRANSMITTAL LETTER**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed is a THIRD Information Disclosure Statement and accompanying form
PTO-1449 for the above-identified patent application.

- ☒ No additional fee for submission of an IDS is required.
- ☐ The fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e), and the fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) are also enclosed.
- ☐ Charge _____ to Deposit Account No. 02-4800 for the fee due.
- ☐ A check in the amount of _____ is enclosed for the fee due.
- ☐ Charge _____ to credit card. Form PTO-2038 is attached.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BUCHANAN INGERSOLL PC

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By Nicole D. Dretar
Nicole D. Dretar
Registration No. 54,076

Date: April 25, 2006

Buchanan Ingersoll PC

ATTORNEYS

Including attorneys from Burns Doane Swecker & Mathis

(8/05)



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In re Patent Application of)	
J. Chris Sackellares et al.)	Group Art Unit: 3736
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THIRD INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98.

Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed. However, copies of the listed U.S. patents and U.S. patent application publications are not enclosed since it is no longer required according to the July 11, 2003 waiver of the requirement for copies of cited U.S. patents and U.S. patent application publications in national patent applications filed after June 30, 2003 and international applications entering the national stage under 35 U.S.C. § 371 after June 30, 2003.

The Examiner's attention is directed to application numbers 11/339,606, naming James Chris Sackellares et al. as inventor and filed on January 26, 2006, and 10/673,329, naming James Chris Sackellares et al. as inventors and filed on September 30, 2003, and the documents cited therein.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

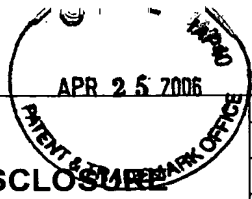
Respectfully submitted,

BUCHANAN INGERSOLL PC

Date April 25, 2006

By: Nicole D. Dretar
Nicole D. Dretar
Registration No. 54,076

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Alexandria, Virginia 22313-1404
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Substitute for form 1449A/PTO & 1449B/PTO

**THIRD
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 2

Complete if Known

Application Number	10/648,354
Filing Date	August 27, 2003
First Named Inventor	J. Chris Sackellares et al.
Examiner Name	Vikram P Sundararaman
Attorney Docket Number	1028724-000142

U.S. PATENT DOCUMENTS

Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)
	6,507,754		Le Van Quyen et al.	1/14/2003

FOREIGN PATENT DOCUMENTS

Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	STATUS						
					Translation	Partial Translation	Eng. Lang. Summary	Search Report	IPER	Abstract	Cited in Spec

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	IASEMIDIS et al., "Phase Space Topography of the Electrocardiogram and the Lyapunov Exponent in Partial Seizures," Brain Topography, Vol. 2, No. 3, pp. 187-201 (1990).
	PINCUS, "Approximate Entropy as a Measure of System Complexity," Proceedings of the National Academy of Science of the United States of America, Vol. 88, pp. 2297-2301 (1991).
	J.C. SACKELLARES et al., "Epileptic Seizures as Neural Resetting Mechanisms," Epilepsia, Vol. 38, Suppl. 3, p. 189, (1997).
	L. D. IASEMIDIS et al., "Dynamical Resetting of Human Brain at Epileptic Seizures: Application of Nonlinear Dynamics and Global Optimization Techniques," IEEE Transactions on Biomedical Engineering, Vol. 51, No. 3, pp. 493-506, (2004).
	WOLF et al., "Determining Lyapunov Exponents from a Time Series," Physica D., Vol. 16D, pp. 285-317 (1985).

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

THIRD INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	2	of	2
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Application Number	10/648,354
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Examiner Name	Vikram P Sundararaman
Attorney Docket Number	1028724-000142

NON-PATENT LITERATURE DOCUMENTS

Examiner
Initials

Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.

ECKMANN et al. "Lyapunov Exponents from Time Series," Physical Review A, Vol. 34, No. 6, pp. 4971-4972 (1986).

IASEMIDIS et al., "Adaptive Epileptic Seizure Prediction System," IEEE Transactions in Biomedical Engineering, Vol. 50, No. 5, pp. 616-627, (2003).

IASEMIDIS et al., "Prediction of Human Epileptic Seizures Based on Optimization and Phase Changes of Brain Electrical Activity," Optimization Methods and Software, Vol. 18, No. 1, pp 81-104, (2003).

IASSEMIDIS et al., "Seizure Warning Algorithm Based on Spatiotemporal Dynamics of Intracranial EEG," *Mathematical Programming*, Vol. 101, No. 2, pp. 365-385, (2004).

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